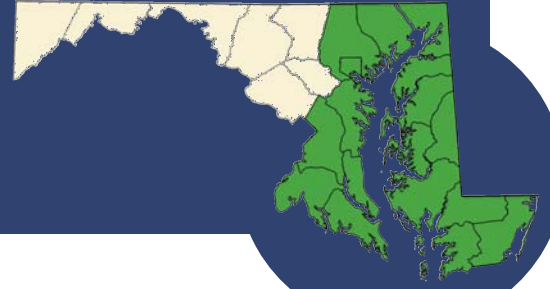


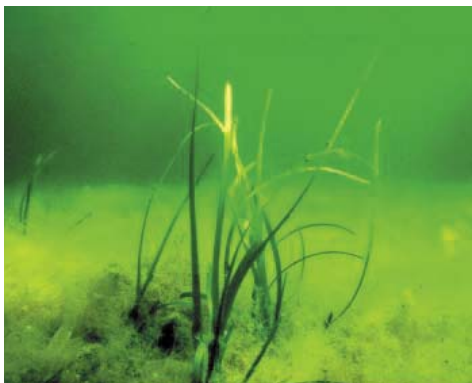
Submerged Aquatic Vegetation & Wetlands

Maryland Coastal Program



The Issue...

Wetlands and submerged aquatic vegetation (SAV) are both critical components of Maryland's coastal ecosystem. SAV, also known as bay grass or seagrass, helps improve water quality and provides food and shelter for waterfowl, fish, and shellfish. Similar to SAV, wetlands serve as the primary habitat for many of the State's living resources, and in addition, provide water quality and flood control benefits.



Submerged Aquatic Vegetation

In the Coastal Bays, most seagrass was eliminated by disease in the 1930's. In the Chesapeake Bay, the dramatic baywide decline of all SAV species in the late 1960s and 1970s was correlated with increasing nutrient and sediment inputs from development of the surrounding watershed.

The Chesapeake Bay watershed has also experienced substantial losses of wetlands between the mid 1950s and the late 1970s, with annual losses averaging over 2,800 acres. Current State programs work to protect and restore existing wetlands, however, increasing development and population pressure continue to degrade and destroy both tidal and nontidal wetlands throughout Maryland.

The State's Involvement...

Because of their importance, the protection and restoration of both SAV and wetlands are priorities for the State. The Chesapeake Bay 2000 Agreement, signed by Maryland and its Bay Partners, set forth ambitious restoration goals for SAV and wetlands. The Agreement calls for the restoration of 25,000 acres of tidal and non-tidal wetlands by 2010 and established a goal of no-net loss of existing wetlands acreage and function in the signatories' regulatory programs. The Agreement also called for the accelerated protection and restoration of SAV in the Chesapeake Bay and its tributaries. An enhanced bay-wide grass restoration goal, adopted subsequent to the Agreement in December 2003, calls for the protection and restoration of 185,000 acres of SAV by 2010.

Wetland and SAV protection and restoration are also of major importance in Maryland's Coastal Bays. The Comprehensive Conservation and Management Plan for the Coastal Bays (1999) sets forth specific action plans related to identifying, protecting, enhancing and promoting the natural recovery of both valuable resources.

The Coastal Program's Role...

The Coastal Program has long recognized the value of both SAV and wetlands to Maryland's coastal ecosystem and plays an integral role in supporting data acquisition, research activities and resource management initiatives. The Program is currently involved in a variety of projects associated with SAV and wetlands protection and enhancement throughout the Chesapeake and Coastal Bays watersheds.

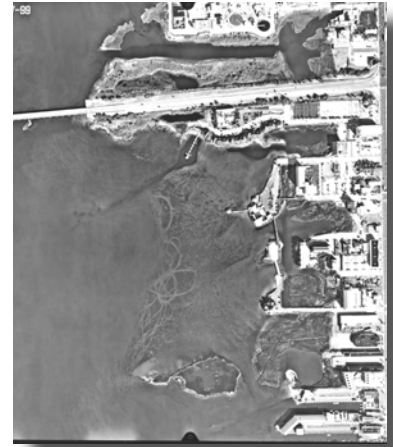


Stephen Decatur Park, Worcester County

Significant Programs & Accomplishments...

Annual SAV Surveys...

Annual aerial surveys of SAV beds in the Chesapeake and Coastal Bays provide critical information to resource managers in the State. The annual surveys support the assessment of segment specific bay grass populations that, in conjunction with corresponding water quality data are used to identify specific sites and methods for bay grass restoration. The analysis of the aerial surveys conducted in the Coastal Bays showed extensive seagrass scarring from recreational and commercial boating activities. The survey photos provided the impetus behind the hydraulic clam dredging restrictions, enacted by the Maryland Legislature in 2000, and subsequent establishment of SAV protection zones. Recognizing the importance of the data, the Coastal Program annually funds the Virginia Institute of Marine Science to conduct the overflights and assessments.



Survey photo showing boat scarring.



Bay Grasses in Classes

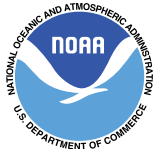
Bay Grasses in Classes: The Bay Grasses in Classes Program is a hands-on, cooperative interactive education project facilitated jointly by the Maryland Department of Natural Resources and the Chesapeake Bay Foundation. In 2004, approximately 6,700 middle and high school students from over 200 classes will grow bay grass in the classroom, learn about its biology and importance to the ecosystem, and then plant the grasses in the Chesapeake Bay. The program relies on data collected through the annual SAV surveys to identify and target transplanting sites. Each year with support from the Coastal Program, Maryland students experience first-hand the importance of bay grasses through this program.

Digital Wetlands Mapping: Maryland's Coastal Program provided support to the State's extensive digital wetland mapping effort. This multi-year project (1992 – 2003) developed digital wetland maps for all sixteen coastal counties. The digital files are available to interested users through DNR's normal spatial data distribution system as part of the Maryland technology toolbox (www.msgic.state.md.us/techtool).

Watershed-based Wetland Characterization: In September, 2000, the U.S. Fish and Wildlife Service, Northeast Region, National Wetlands Inventory Program worked cooperatively with DNR's Coastal Program and the Landscape and Watershed Analysis Division to produce a watershed-based wetland characterization for Maryland's Nanticoke River and Coastal Bays watersheds. This effort, the first of its kind in Maryland, involved the production of new information to assist Maryland wetland managers in wetland planning and evaluation at the watershed level. The foundation of the project is a comprehensive, geospatial wetland database that contains such information as the location and type of existing wetlands, wetland functions, potential wetland restoration sites, and the overall condition of natural habitat in the watershed. This project aids the development of wetland protection strategies for individual watersheds that address wetland acquisition, restoration, and other means of strengthening wetland protection in priority areas.



Maryland Coastal Program
Watershed Services
Maryland Department of Natural Resources
Tawes State Office Building, E-2
580 Taylor Ave
Annapolis, MD 21401



Toll Free in Maryland: 1-877-620-8DNR Ext. 8730
Out of State: 410-260-8730
TTY users call the Maryland Relay
<http://dnr.maryland.gov>

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